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M/S 534

FEB 11 1982

James A. Thompson, Manager
Northwest Environmental & Industrial Hygiene
Aluminum Company of America
P.O. Box 221
Wenatchee, WA 98801

Dear Mr. Thompson:

We have reviewed your proposed groundwater monitoring waiver as requested. Since this site is not covered under RCRA, it should be understood that this review is not to be considered a waiver, approval, or any other RCRA action as we discussed on the phone. We hope that our comments will be useful to your environmental program.

Aluminum reduction plant potlings are not currently regulated under RCRA. We do not have any information on the future of any regulation which may include the spent potlinings.

The report as submitted provides an adequate discussion of precipitation, evaporation, and the unsaturated zone characteristics so as to demonstrate a low potential for migration to wells or surface water. However, regulation 40 CFR 265.90(c)(2) requires that the potential for hazardous waste or hazardous work constituents which enter the uppermost aquifer to migrate to a water supply well or surface water be evaluated. Since most aquifers are tributary to surface waters it is almost impossible at most sites to certify that "if" a hazardous waste should migrate to the uppermost aquifer, that it has a low potential for ever migrating to surface water.

The report for Alcoa, Wenatchee Works, states (p.504) "The characteristics of the saturated zone are such that any downward seepage from the site would be rapidly transported to the Columbia River". Unfortunately, this rapid movement to the surface water, no matter what the dilution, makes it almost impossible to meet the RCRA requirements.

The following comments relate to specific items in the technical report:

Page 2-8 We question the estimated effective porosity of 30 to 40 percent for the Columbia River Group. Our evaluation is that the effective porosity would be closer to 5%. This difference however does not effect the evaluation of waste migration to the shallow alluvial aquifer.

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Page 2-10 The first paragraph states that the pool elevations behind Rock Island Dam are controlled by spillway operations generally within a range between 612.5 and 613 feet above MSL while Figure 2.3 gives a stage-discharge curve for the Rock Island Pool at the Wenatchee Works. If the pool elevation is being controlled by spillway adjustments, how can you establish a stage discharge relationship?

Figure 2.2 The alluvial aquifer piezometric contour going through the Wenatchee Works Plant Site is shown as the 600 foot contour. If the Rock Island Pool is being maintained at an elevation of 612 + feet, how can the adjacent ground water level be below pool level?

Table 3.2 This table shows that wells 78 and 79 (which are located at the Wenatchee Works) develop ground water from the shallow aquifer. The best demonstration that the pot lining disposal facility and the other waste disposal facilities on site are not impacting ground water would be provided by some chemical tests on ground water from these two wells.

We hope that these comments will be useful. If you have any questions, please contact us.

Sincerely,

Neil E. Thompson
Facilities Management Section

NThompson:may 02-09-82

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